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A Unitarian Church

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# A UNITARIAN CHURCH

BY

REXFORD NEWCOMB

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THESIS

FOR

DEGREE OF BACHELOR OF SCIENCE

IN

ARCHITECTURE

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COLLEGE OF ENGINEERING
UNIVERSITY OF ILLINOIS
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# UNIVERSITY OF ILLINOIS

JUNE 1, 1911.

THIS IS TO CERTIFY THAT THE THESIS PREPARED UNDER MY SUPERVISION BY

REXFORD NEWCOMB

ENTITLED A UNITARIAN CHURCH

IS APPROVED BY ME AS FULFILLING THIS PART OF THE REQUIREMENTS FOR THE

DEGREE OF BACHELOR OF SCIENCE IN ARCHITECTURE

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# A UNITARIAN CHURCH.

The subject, "A Unitarian Church" has been chosen by me for two reasons: first because I am a Unitarian and naturally wish for the welfare of the Unitarian movement; and second because of the possibilities for architectural expression that lay in the subject.

Believing that a building should not only adequately and satisfactorily fulfill the utilitarian purposes for which it is designed but that it should also express to the fullest extent the spirit and the phase of life for which it is intended, I set about to find out what a Unitarian Church should be. This research naturally lead me to an analysis of all churches in their primary function.

A church is a place to which we may retire for meditation or other spiritual refreshment. It is the purpose of the church building not only to supply a shelter to the altar of God but also to create in the worshipper a spiritual feeling, a feeling of communion with the Most High. These things are accomplished by several means among which are: a fine arrangement of parts so that the worshipper may be bodily comfortable and able to invite his soul; the use of beautiful forms which direct his mind toward the heavenly and God-like and the use of beautiful ornament which leads him to appreciate all nature in God's earthly handiwork and makes him content and happy to dwell here in earth. This then is what the church should be in general.

In order to find out just what a Unitarian Church,as differentiated from other churches, should be, I began by an analysis of the Unitarian movement; its history; its principles and its activities. The Unitarian movement is not as new as is generally believed but dates back to the time of Arius, who at the first general council of Nicaea in A.D. 325 denied the doctrine that was finally adopted - the Nicene Creed which is decidedly trinitarian. From that time on the movement has grown and spread in India, Hungary, Germany, France, England, and America.

It is the movement in America with which we are concerned. It dates back to the Mayflower but came out as a distinct thing first in 1715 when Rev. John Wise of Ipswich, Mass., in his "Government of New England Churches" insisted upon the absolute independence of the local church in contrast with the Presbyterian and Episcopalian hierarchies. Freedom was then incorporated in the American movement and not only was the independence of the local church society guaranteed but the independence of the separate individuals was made safe. Hence, although today all the Unitarian Societies are bound in a sort of fellowship, known as the American Unitarian Association, there is no pope, bishop, or any other church head and separate church societies are absolutely free to do as they wish.

Freedom then is a cardinal principle as well as the belief in a God of one part - a Unity - all in all. By at once placing these two great historical points of contention out of the way the Unitarians were ready to follow out their own conscience and individually to live their beliefs, hence Unitarianism

is really not a "belief" at all, but a mode of living. The Unitarians have no creed and no one subscribes to a creed of any kind but the general principles held by most Unitarian societies are:

(1) The Fatherhood of God.

(2) The Brotherhood of Man.

(3) The Leadership of Jesus.

(4) Salvation by Character.

(5) The Progress of Mankind onward and upward forever.

With this brief survey of the Unitarian movement we may write down immediately the things the church building should express. First of all it should express "Majesty" - the majesty and universal pre-eminence of God to whom it is reared. Next perhaps comes the second characteristic of God - "Unity". Next it should express the idea that it stands for a people who are intensely human, brothers one to another and lovers of all God's creatures and lastly the element of Progress and Evolution forever and externally. These attributes I have tried to express.

As the beliefs and activities of the separate societies vary greatly, we find various types of church. To design a Unitarian Church means that one must study the local congregation and interpret its views into the architecture. In this problem I have tried to avoid any specific kind of congregation, such as that of a University community where most of the attendants would be learned and not especially dependent upon the environment for their state of mind. But I have chosen the

ordinary case of one of our middle-west cities where there are uneducated as well as educated people in the society who really do need some beauty around them to lift them up above the every-day and commonplace into communion with God.

## I. PROGRAM.

It is proposed to build in a western prairie-country city of twenty-five thousand population, a church for the Unitarian Society of the city. The proposed site is a lot 190 by 330 feet at the junction of two of the main residence streets in a very nice residence section of the city where wide streets and broad parking are features of the municipal layout. The building is to serve two purposes, namely: as a house of worship and as a club-house for the congregation.

### Requirements in Detail.

I.

A. An entrance vestibule directly accessible to and near the street out of which opens the general circulation of the building. Here it is designed that members and pastor may meet after the services for a chat and short discussion of the sermon, among themselves.

B. An auditorium of at least four hundred sittings on the first floor and gallery provided with sufficient entrances so that after service no exit shall be overcrowded. The main features of this room will be the organ and the speaker's rostrum.

C. A church parlor having a minimum floor area of one

thousand square feet, directly accessable to dining-room and kitchen so that it may be used as a banquet room on occasion and also directly accessible to the library and pastor's study. This group is to be related to the church auditorium so that when services are in session no disturbance will be made by children or others going to the parlor by way of any entrance. It is to be provided with an entrance which may be used when the church proper is not open. The parlor is to be provided with a large fireplace and is to be related to the library and dining-room so that all may be thrown together for large social affairs of the church. This parlor is to be used if need be for Sunday-School purposes.

D. A library of a minimum floor area of three hundred square feet communicating with the pastor's study and related to the parlor as provided before.

E. A pastor's study of about one hundred square feet floor area near an entrance on one of the street sides of the building.

F. A small dining-room of a minimum floor area of four hundred square feet directly communicating with the parlor and kitchen.

G. A kitchen of at least one hundred and fifty square feet floor area which communicates with a rear entrance and with parlor and dining room. It is to be provided with a sink for dish washing and a cupboard and to have space for a gas range and table.

H. Toilets for both sexes, store-room for janitor.

I. Basement for furnace and coal room and storage.

J. An outdoor pulpit placed in such a way as to utilize the lawn in the rear of the church and directly communicating

with the parlor or library.

## II. SOLUTION.

### Design.

In seeking a solution of this problem I naturally referred to some of the monuments of the past. I have gained a great deal of inspiration and help from such structures as the pyramids, the Pantheon at Rome, the Mosque of Omar at Jerusalem, St. Sophia at Constantinople, the Bapistry at Pisa, and St. Peters at Rome. In all these buildings it appears that the quality of Unity has been very well expressed.

After some study of the plan I found that the requirements of the building naturally divided it into two well defined parts - the church proper and the social rooms. In order to get unity out of this situation I found it necessary to distinguish between these two groups. I felt that the auditorium being the place for worship the primary excuse for the building - should be the dominating element. In order to obtain unity here I decided to make the auditorium symmetrical about a point and to relate the social rooms to the auditorium in such a way that they would in no wise rival it in mass, yet at the same time be definitely and coherently related to it, The plan as shown in the drawings is the result.

As the dome of heaven itself formed, at one time, the cover for the worshiping-place of man-kind and the altar of God stood out in the open, I sought to recall this very natural church by covering the auditorium with a great dome. And as the

natural walls of the first open worshipping place were the trees I felt it natural and logical that trees should somewhere be evident in this church which was really seeking simplicity. This accounts for the canopy of the inner dome and the piers supporting it.

The light I have felt should come from above pure and not reflecting earthly things. For this reason the auditorium is lighted by means of the wheel window in the inner dome, which receives the light through the windows in the outer dome.

The decoration I have tried to make subservient to the structure in all cases and for forms I have gone to the local flora. I felt that by bringing these forms into the decoration the worshipper might be led to appreciate the nature about us - the only visible evidence of God's handiwork, and be made to feel that the church is after all a place for common and daily use. For this very reason and for the reason that we no longer have to show man what heaven might be by giving him a foretaste in the church, as the medieval peoples did, I have omitted all forms of ornament used at this period. I have tried to make the auditorium as glorious and majestic as was consistent with simplicity. The other features I have treated in such a way that while being in the spirit of the main auditorium they are subordinate to it in size, form, and decoration.

## Construction.

The footings which set directly upon the gravel bed are of concrete up to within two feet of grade line above which the

foundation of Concord granite is set. The walls of the building are of brick and of a general thickness of two feet. The face brick are of a cream yellow tone in color laid in common bond except where the bond forms part of the decorative scheme. Ornament of polychrome terra cotta and of tile mosaic are introduced to relieve the wall surface.

The piers supporting the done have footings of concrete, spread so as to distribute the load on the foundation bed. The piers themselves are of buff Bedford stone and are about three feet thick. They run up to the springing of the inner shell of the dome which is of buff terra cotta Gustavino tiles. The upper dome is of reinforced concrete. It has a span of 58 feet and the length of radius is 30 feet, the center being 6 ft. below the springing line. The minimum thickness of the concrete shell is 4 inches as thinner sections are not to be trusted even in 1:2:3 concrete owing to mechanical difficulties in construction or irregularities of materials. A maximum thickness of 6 inches is used except at the base where the thickness is increased to cover extra reinforcement introduced to withstand the bulging stress on the leeward side due to the wind loads. At the base four rods were introduced as a precaution against thermal stresses and to prevent damage due to settlement of the supporting structure. The dome was covered with a coat of asphalt water-proofing over which the tiles were laid.

The mechanical features of the building are of the latest design. The lighting which is electric combines two systems, the direct and indirect. The entrance vestibules and corridors are lighted by indirect fixtures while the auditorium and parlors are lighted by direct fixtures. All wiring is concealed. The

auditorium is lighted by six large electroliers suspended from the dome and by bracket groups on the piers. The parlor is lighted by central electroliers and wall brackets.

The heating system is a vacuum steam system. The boilers are located in the basement under the auditorium so that the smoke discharges into the chimney in parlor wall.

Self flushing toilet fixtures are used as well as self closing faucets on wash bowl which are of the one piece enamel design.

All walks and exterior seats are of concrete while the steps are of granite the same as the foundation walls. The electroliers on the exterior are of bronze.

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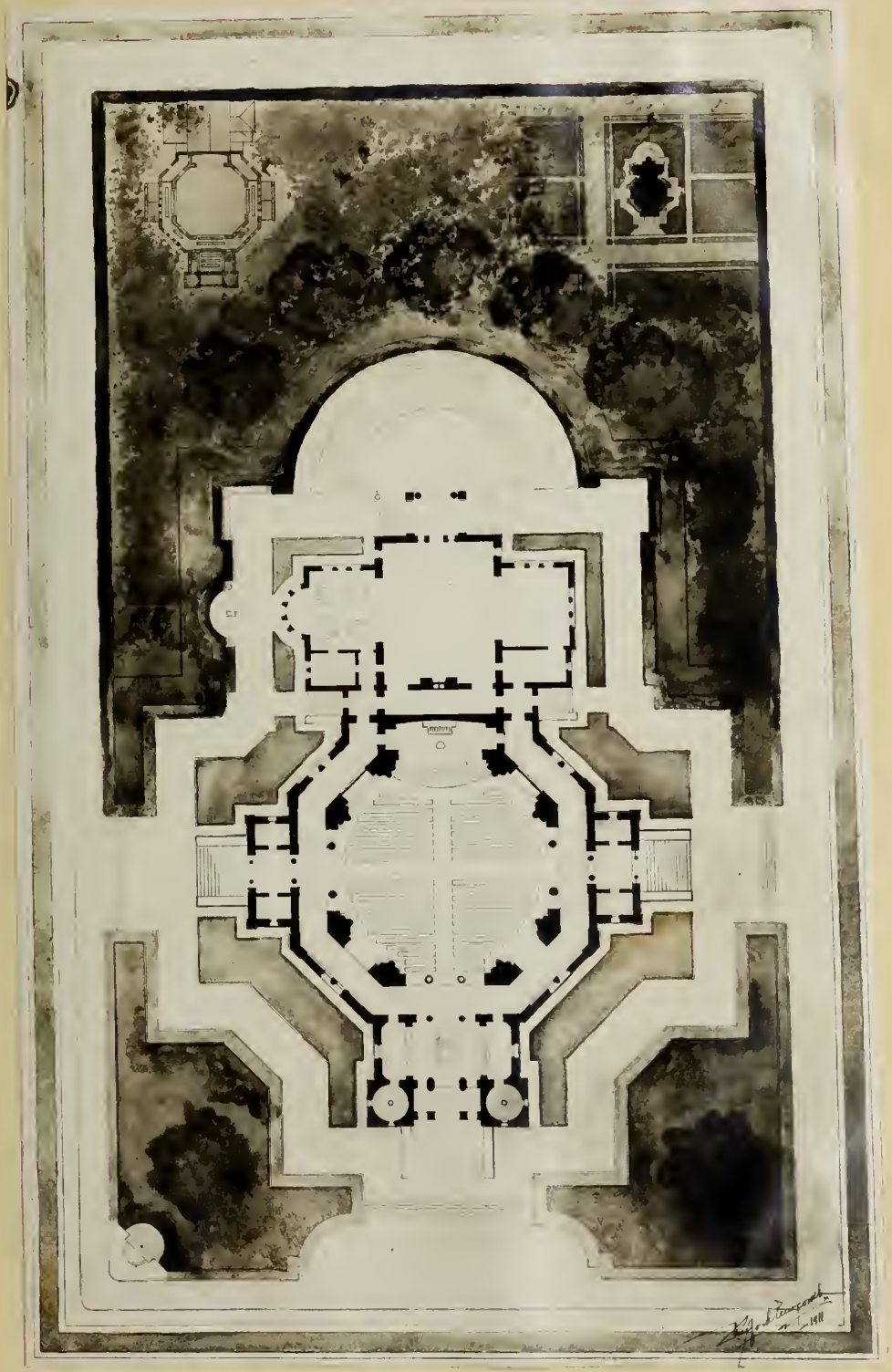

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